

REMARKS

Claims 40-45, 53-55, and 69-70 are pending in the present application.

The rejections of: (a) Claims 40-42, 69, and 70 under 35 U.S.C. §103(a) over Saija et al; (b) Claims 40-45 under 35 U.S.C. §103(a) over Huang et al; and (c) Claims 40-42, 53-55, 69, and 70 under 35 U.S.C. §103(a) over Saija et al in view of Tokozawa et al, Manson et al, and Kitiyakara et al, are respectfully traversed.

The claimed invention relates to a composition consisting of: (a) isolated or purified ferulic acid or an ester thereof, or a pharmaceutically acceptable salt thereof, and (b) isolated or purified caffeic acid and/or chlorogenic acid, or pharmaceutically acceptable salts thereof, and a suitable excipient or carrier; where (a) and (b) are present in an amount sufficient to lower blood pressure or suppress a rise in blood pressure when administered to a mammal (Claim 40). The claimed invention also relates to a process for treating hypertension or high blood pressure comprising administering an effective dose of this composition to a subject in need thereof; where hypertension is characterized by high systolic or diastolic blood pressure, or both (Claim 53). Applicants submit that such an invention is not obvious in view of the cited references.

In the Office Action, the Examiner has held that the claims are obvious over: (i) Saija et al, (ii) Huang et al, and (iii) Saija et al in view of Yokozawa et al, Manson et al, and Kitiyakara et al. As recognized by the Examiner, none of the cited art disclose or suggest a composition containing **both**: (a) isolated or purified ferulic acid or an ester thereof, or a pharmaceutically acceptable salt thereof, and (b) isolated or purified caffeic acid and/or chlorogenic acid, or pharmaceutically acceptable salts thereof, much less administration of such a compound for treating hypertension.

The cited references do, as the Examiner indicates, disclose compositions containing individually ferulic acid, caffeic acid, or chlorogenic acid. The Examiner alleges that since each reference discloses that these compositions containing the individual components may be used for the same purpose, it is *prima facie* obvious to combine these components in a single composition.

The Examiner is reminded that as set forth in MPEP §716.02(a) “greater than expected results are evidence of nonobviousness.” Evidence of a greater than expected result may also be shown by demonstrating an effect which is greater than the sum of each of the effects taken separately (i.e., demonstrating "synergism"). *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989).

Applicants submit that the failure of the cited references to specifically disclose compositions containing individually ferulic acid, caffeic acid, or chlorogenic acid is a deficiency that is fatal to the Examiner’s case. Specifically, Applicants wish to direct the Examiner’s attention to the experimental data set forth in Table 1 (page 15) of the present application, which shows the clear advantages of co-administration of ferulic acid with caffeic acid and/or chlorogenic acid. By comparing Test Plots 4-6 to Test Plots 1-3 and looking at the 1 hour point it is clear that the co-administration of ferulic acid with caffeic acid and/or chlorogenic acid is clearly greater than the additive values of the individual administration of these compounds, thus providing evidence of synergism.

However, with respect to the data presented in Table 1, the Examiner has been skeptical of whether these data support a conclusion of synergism for two reasons:

- 1) the effects are additive at 10 minutes; and

- 2) taking into account the error intervals, the effects “are simply the sum of their individual effects.”

In response to these criticisms, Applicants submit that the the first criticism is without merit as “Evidence of unobvious or unexpected advantageous properties, such as superiority in a property the claimed compound shares with the prior art, can rebut *prima facie* obviousness. “Evidence that a compound is unexpectedly superior in one of a spectrum of common properties . . . can be enough to rebut a *prima facie* case of obviousness.” No set number of examples of superiority is required. *In re Chupp*, 816 F.2d 643, 646, 2 USPQ2d 1437, 1439 (Fed. Cir. 1987)” Thus, the effects demonstrated at the 1 hour time point are sufficient evidence of superiority, regardless of what is shown after 10 minutes.

As for the second criticism, the Examiner appears to fixate on the standard deviations for the values reported in the Table. However, Applicants submit that this criticism overlooks the statistical significance reported in the Table. Applicants submit that the data set forth in the Table do support a conclusion of synergism. This is especially apparent when comparing Test Plots 4 and 5 to Test Plots 1-3 and looking at the 1 hour point.

In view of the foregoing, Applicants request withdrawal of these grounds of rejection.

Applicants submit that the present application is now in condition for allowance.
Early notification of such action is earnestly solicited.


Respectfully submitted,

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